

TRANSMISSION APPARATUS FOR A WORKING VEHICLE

ABSTRACT

Sun-and-planetary gearing for differentially drivingly connecting the front wheels to the rear wheels is arranged coaxially to a motor shaft of a hydrostatic transmission so as to provide a compact transmission apparatus having the hydrostatic transmission for a working vehicle. The sun-and-planetary gearing includes a first element drivingly connected to the motor shaft rotating integrally with the motor shaft; a second element drivingly connected to front wheels of the working vehicle; and a third element drivingly connected to rear wheels of the working vehicle and differentially connected to the second element through the first element. A differential locking mechanism for locking the second and third elements with each other may be disposed in the transmission apparatus. At least one of the second and third elements may include a shaft drivingly connected to either front or rear wheels so that the differential locking mechanism may be disposed on the shaft.